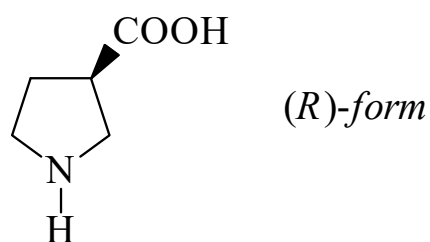




>>Entry Name: 3-Pyrrolidinecarboxylic acid

Synonym(s): β -Proline



CAS Registry Number: 59378-87-9

Molecular Formula: $C_5H_9NO_2$

Molecular Weight: 115.132

Accurate Mass: 115.063329

Percentage Composition: C 52.16%; H 7.88%; N 12.17%; O 27.79%

>>Derivative: N-Me

Synonym(s): Achyranthine

Molecular Formula: $C_6H_{11}NO_2$

Molecular Weight: 129.158

Accurate Mass: 129.078979

Percentage Composition: C 55.80%; H 8.58%; N 10.84%; O 24.77%

Biological Source: Alkaloid from *Achyranthes aspera*

Use/Importance: Vasodilator, diuretic, purgative, antihypertensive agent

Physical Description: Monohydrate

Melting Point: Mp 292-293 dec.°

Optical Rotation: $[\alpha]_D^{25} -6.5$

Calculated Log P Data: Log P -2.23 (calc)

Other Data: Struct. proof not convincing. Abs. config. not detd.

>>Derivative: N-Me; hydroiodide

Melting Point: Mp 204-205°

>>Derivative: Dimethylbetaine

Synonym(s): 3-Carboxy-1,1-dimethylpyrrolidinium hydroxide inner salt, 9Cl. β -Stachydrine

CAS Registry Number: 86849-51-6

Molecular Formula: $C_7H_{13}NO_2$

Molecular Weight: 143.185

Accurate Mass: 143.094629

Percentage Composition: C 58.72%; H 9.15%; N 9.78%; O 22.35%

Biological Source: Alkaloid from the marine red alga *Griffithsia flosculosa*

Melting Point: Mp 238°

Other Data: Natural β -Stachydrine was characterised as the hydrochloride. The Mp given here is for semisynthetic material obt. by methylation of Achyranthine. Abs. config. not detd.

>>Derivative: Dimethylbetaine; hydrochloride

Melting Point: Mp 236-238 dec.°

Optical Rotation: $[\alpha]_D^{23} -5.5$ (c ,0.27 in MeOH)

Other Data: Deriv. of β -Stachydrine

>>Derivative: Dimethylbetaine; hydroiodide

Melting Point: Mp 267°

Other Data: Derived from Achyranthine